

Amendments to the Specification

- 1) Please insert the following subtitle at page 1, below the title:

Background

- 2) Please insert the following subtitle at page 3, line 38:

Summary

- 3) Please insert the following subtitle and text at page 4, line 6 after the above-inserted subtitle:

Brief Description of the Drawings

For a further understanding of the nature and objects for the present invention, reference should be made to the following detailed description, taken in conjunction with the accompanying drawings, in which like elements are given the same or analogous reference numbers and wherein:

- Figure 1 illustrates threshold levels for the appearance of plasma in the shielding gas, as a function of the helium content in nitrogen and of the laser's power density; and
- Figure 2 illustrates threshold levels for the appearance of plasma in the shielding gas, as a function of the helium content in nitrogen and of the laser's power.

- 4) Please insert the following subtitle and text after the above-inserted subtitle and text:

Description of Preferred Embodiments

The solution of the invention is therefore a laser beam welding process employing a shielding gas mixture containing nitrogen and helium, in which the proportion of nitrogen and/or helium in said gas mixture is chosen or adjusted according to the power or power density of said laser beam.

- 5) Please insert the following paragraph at page 11, line 19:

It will be understood that many additional changes in the details, materials, steps and arrangement of parts, which have been herein described in order to explain the nature of the invention, may be made by those skilled in the art within the principle and scope of the invention as expressed in the appended claims. Thus, the present invention is not intended to be limited to the specific embodiments in the examples given above.

- 6) Please replace the subtitle at page 11, line 1, and replace it with the following text:

~~CLAIMS~~ What is claimed is:

- 7) Please insert the following subtitle and text to new page 15, line 1:

Abstract of the Disclosure

A method and an apparatus for welding with a laser beam. A shielding gas mixture of nitrogen and helium is used and the proportions of the component gases are modified depending on the laser beam's power or power density. Plasma formation in the shield gas is minimized by increasing the proportion of helium as the laser beam's power or power density increases.